

the non-obviousness of independent claims necessarily leads to the non-obviousness of claims dependent thereon.<sup>2</sup>

**A. The References Do Not Teach Every Element Of The Pending Claims**

Applicants respectfully submit that the references cited by the Examiner do not teach every element of the claims. The Examiner has admitted that "[t]he primary references do not teach expressly the employment of ascorbic acid or particularly point out the amount of VOC." (Office Action, *p.* 2). Applicants note that the references are silent with respect to the VOC content of their compositions. Thus, none of the references teach compositions (e.g., food products) with very low VOC content (i.e., less than 100 ppm) as are presently being claimed.

The failure of the references to teach the low VOC element has been repeatedly brought to the Examiner's attention in the Applicant's previous responses. However, the Examiner still has not provided any basis for the low VOC element in any of the cited references. Instead of providing actual evidence of low VOC content in the cited references, the Examiner provides the following reasoning:

Regarding to the limitation about the amount of VOC, since the prior art teach that the food products containing CLA do not have any sensoric property caused by VOC, the amount of VOC is reasonably believed to be very low. The amount of VOC claimed herein is either within the scope of the prior art, or an obvious variation of the prior art, lacking the criticality to the final products. Office Action, page 3.

Instead of citing some teaching in the reference of low VOC content, the Examiner cites to the **lack of teaching** regarding any "sensoric property caused by VOC." This lack of teaching cannot substitute for an actual or inherent teaching of the claimed element. Indeed, the Examiner is evidently applying a flawed inherency analysis. As the Federal Circuit has held in *Continental Can*:

To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.

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<sup>2</sup> §MPEP 2143.03.

*Continental Can Company USA, Inc., v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991) (emphasis added) (holding no anticipation due to inherency). Thus, argued gaps in a reference must be filled by evidence that clearly shows the descriptive matter is necessarily present. This is a far more stringent standard than the standard urged by the Examiner. Indeed, inherency "may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* at 1269 (quoting *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981)).

In the present case, the Examiner is relying on possibilities. The low VOC element is not **necessarily** present in the cited references. Accordingly, the cited references, alone or combined, do not teach the low VOC element. The Examiner has failed to establish a *prima facie* case of obviousness. Thus, the Applicants respectfully request that the claims be passed to allowance.

**B. The Examiner Has Ignored Evidence Offered by the Applicants in Support of Patentability**

In their previous amendment, Applicants presented extensive arguments regarding the problems that needed to be solved to produce CLA with a low VOC content. In particular, Applicants teach in the specification that the CLA oxidation problem is likely caused by metal ion contamination in the starting material. Applicants solved this problem by using a combination of methods, including, but not limited to addition of metal oxidant chelators and the removal of pro-oxidants by methods such as distillation and treatment with adsorbing agents. (Specification, *p.* 24, *ll.* 20-25). As demonstrated in the specification, the methods invented by the Applicants' were **necessary** to prevent the oxidation of CLA into the typical CLA oxidant compounds that affect the smell and taste compositions (*e.g.*, food stuffs) containing CLA. It is well settled in patent law that "[i]t should not be necessary . . . to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified." (*In re Spinnable*, 405 F.2d 578, 585 (C.C.P.A. 1969); *In re Kosei Nomiya et al.*, 509 F.2d 566, 571 (C.C.P.A. 1975)).

As it stands, none of the cited references teach the removal of pro-oxidants by methods such as distillation and treatment with adsorbing agents and none of the cited

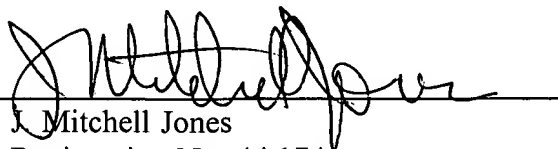
references teach compositions comprising conjugated linoleic acid moieties that contain less than 100 ppm volatile organic compounds as are presently being recited.

Instead of addressing this argument, the Examiner states that "Lievense teaches CLA and food product containing the same. If the CLA composition containing VOC and smelly, it can not be used in food product." (Office Action, pages 3-4). Therefore, the Examiner does not allege that Lievense or any of the cited references recognize the problem solved by the Applicants (i.e., the need to remove metal contaminants from the CLA compositions) or provide a solution to the problem identified by the Applicants. Applicants further note that the Examiner is mistaken in his assertion that metal containers are the problem. Metal containers are not the problem. The problem is metal contaminants in the starting seed oil material. Thus, the Examiner has not rebutted the Applicants argument that the invention is patentable because of the discovery of the source of the oxidation problem. Accordingly, Applicants respectfully request that the claims be passed to allowance.

### **C O N C L U S I O N**

All grounds of rejection and objection of the Office Action of January 8, 2003 having been addressed, reconsideration of the application is respectfully requested. It is respectfully submitted that the invention as claimed fully meets all requirements for patentability and that the claims are worthy of allowance. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicants encourage the Examiner to call the undersigned collect at (608) 218-6900.

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**Appendix 1**

Marked-up version of the rewritten, added, and/or cancelled claims pursuant to 37 C.F.R. §1.121(c)(1)(ii).

39. (New) A conjugated linoleic acid composition stabilized for storage comprising an isomerized conjugated linoleic acid moiety, said composition containing less than 100 parts per million total of volatile organic compounds after storage, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

**Appendix 2**

Clean version of the entire set of pending claims pursuant to 37 C.F.R. §1.121(c)(3).

1. (Amended once) A composition comprising an isomerized conjugated linoleic acid moiety, said composition containing less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.
2. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is a free fatty acid.
3. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is an alkyl ester.
4. The composition of claim 1, wherein said isomerized conjugated linoleic acid moiety is a triacylglyceride.
5. The composition of claim 1, wherein said composition further comprises a metal oxidant chelator.
7. (Amended once) The composition of claim 1, wherein said composition contains less than 50 parts per million total of said volatile organic compounds.
8. (Amended once) The composition of claim 1, wherein said composition contains less than 10 parts per million total of said volatile organic compounds.
9. (Amended once) The composition of claim 1, wherein said composition contains less than 5 parts per million total of said volatile organic compounds.

10. (Amended once) A food product comprising an isomerized conjugated linoleic acid moiety and an metal oxidant chelator, wherein said isomerized conjugated linoleic acid moiety contains less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

11. The food product of claim 10, wherein said moiety is selected from the group consisting of a triacylglyceride, a free fatty acid, and an alkyl ester.

12. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 50 parts per million total of said volatile organic compounds.

13. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 10 parts per million total of said volatile organic compounds.

14. (Amended once) The food product of claim 10, wherein said isomerized conjugated linoleic acid moiety contains less than 5 parts per million total of said volatile organic compounds.

15. (Amended once) A food supplement comprising a isomerized conjugated linoleic acid moiety and an metal oxidant chelator, wherein said isomerized conjugated linoleic acid moiety contains less than 100 parts per million total of volatile organic compounds, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.

16. The food supplement of claim 15, wherein said moiety is selected from the group consisting of a triacylglyceride, a free fatty acid, and an alkyl ester.

17. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 50 parts per million total of said volatile organic compounds.
18. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 10 parts per million total of said volatile organic compounds.
19. (Amended once) The food supplement of claim 15, wherein said isomerized conjugated linoleic acid moiety contains less than 5 parts per million total of said volatile organic compounds.
24. (Amended) A food product comprising a conjugated linoleic acid moiety and a metal oxidant chelator, wherein said conjugated linoleic acid moiety contains less than 100 ppm volatile organic compounds.
25. The food product of Claim 24, wherein said metal oxidant chelator is selected from lecithin and ascorbic acid.
26. (Twice Amended) The food product of Claim 24, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.
27. (Amended once) The food product of Claim 24, wherein said conjugated linoleic acid moiety contains less than 5 ppm of said volatile organic compounds.
28. The food product of Claim 24, wherein said conjugated linoleic acid moiety is an ester of conjugated linoleic acid.

29. The food product of Claim 24, wherein said conjugated linoleic acid moiety is a triglyceride containing conjugated linoleic acid.
30. The food product of Claim 24, wherein said conjugated linoleic acid moiety is a free fatty acid.
31. (Amended once) A food product comprising an isomerized conjugated linoleic acid moiety, said conjugated linoleic acid moiety having a sufficiently low volatile organic compound concentration so that the taste and smell of said food product is not affected, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.
32. The food product of Claim 31, wherein said conjugated linoleic acid moiety is an alkyl ester.
33. The food product of Claim 31, wherein said conjugated linoleic acid moiety is a free fatty acid.
34. The food product of Claim 31, wherein said conjugated linoleic acid moiety is a triglyceride.
35. (Twice Amended) A composition comprising an isomerized conjugated linoleic acid moiety, said conjugated linoleic acid moiety having a sufficiently low volatile organic compound concentration so that the taste and smell of said composition is not affected, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof, further wherein said conjugated linoleic acid moiety is an alkyl ester.



37. The composition of Claim 35, wherein said conjugated linoleic acid moiety is a free fatty acid.
38. The composition of Claim 35, wherein said conjugated linoleic acid moiety is a triglyceride.
39. (New) A conjugated linoleic acid composition stabilized for storage comprising an isomerized conjugated linoleic acid moiety, said composition containing less than 100 parts per million total of volatile organic compounds after storage, wherein said volatile organic compounds are selected from the group consisting of pentane, hexane, heptane, 2-butenal, ethanol, 3-methyl butanal, 4-methyl pentanone, hexanal, heptanal, 2-pental furan, octanol and combinations thereof.